# BASIC IDENTIFICATION OF COMMON GAME AND NON-GAME FISHES OF NORTH CAROLINA

Prepared for use as an Instructional Tool for Wildlife Enforcement Officer Basic Training



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# NORTH CAROLINA WILDLIFE RESOURCES COMMISSION DIVISION OF INLAND FISHERIES

Raleigh, North Carolina

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# **LESSON PURPOSE AND JUSTIFICATION**

# **Lesson Purpose**:

This lesson is intended to provide the student with a basic understanding of fish anatomy and taxonomy to expedite the field identification of common inland fishes.

#### Justification:

If an officer is to be proficient in the enforcement of laws pertaining to fish, he/she must be able to correctly identify all species encountered during routine patrol. The officer will be able to build and maintain good public relations by being able to quickly identify any fish caught by a sportsman. Knowledge gained from this course will also enable the officer to recognize record-size and trophy-size fish. The officer should also be proficient in distinguishing between the two legal classifications of fish as defined in the North Carolina Administrative Code.

# TRAINING OBJECTIVES

- 1. Identify and separate fish into the two legal classifications (inland game fish and non-game fish) as defined in the North Carolina Administrative Code.
  - A. Provide and discuss common and legal definitions.
- 2. Identify various inland fishes found in North Carolina through the use of taxonomic keys and by recognizing characteristics specific to individual fish.
  - A. Discuss anatomical features handout with emphasis on fin placement.
  - B. Explain the utility of the handout "Key to Families of Common North Carolina Fishes", and work students through the key using various specimens.
  - C. Provide students with commonly used characteristics useful when differentiating between specific game and non-game fish species.
- 3. Assist sportsmen in recognizing record-size fish and/or fish eligible for the Wildlife Resources Commission's North Carolina Angler Recognition Program (NCARP).
  - A. Provide list of current record-size fish and discuss minimum trophy requirements for NCARP certification.
  - B. Discuss application procedures for both programs.

# **LEGAL DEFINITIONS OF FISH**

# Webster's New Collegiate Dictionary definition:

*Fish.* - Any numerous cold-blooded, strictly aquatic, water breathing, craniate vertebrates having the limbs (when present) developed as fins, and typically a long, scaly somewhat tapering body ending in a broad vertical caudal fin.

# NC General Statutes (G. S. 113-129) legal classifications:

Fish; Fishes. - All marine mammals; all fishes; all crustaceans; all other fishes.

Inland game fish – Those species of freshwater fish, wherever found, and migratory salt water fish, when found in inland fishing waters, as to which there is an important element of sport in taking and which are denominated as game fish in the regulations of the Wildlife Resources Commission. No species of fish of commercial importance not classified as a game fish in commercial fishing waters as of January 1, 1965, may be classified as an inland game fish in coastal fishing waters without the concurrence of the Marine Fisheries Commission.

*Non-game fish* – All fish found in inland fishing waters other than inland game fish.

## **EXPLANATION OF ANATOMICAL FEATURES**

(Adapted from Mettee et al., 1996)

Although some large fishes are easy to identify at first sight or after comparison with a color photograph, others cannot be distinguished without the use of a taxonomic key. In order to accurately identify fishes obtained in the field, users must have some knowledge of basic anatomical features found on fishes. Once specific morphological characteristics are known, standardized counts and/or measurements can be conducted to determine fish identity.

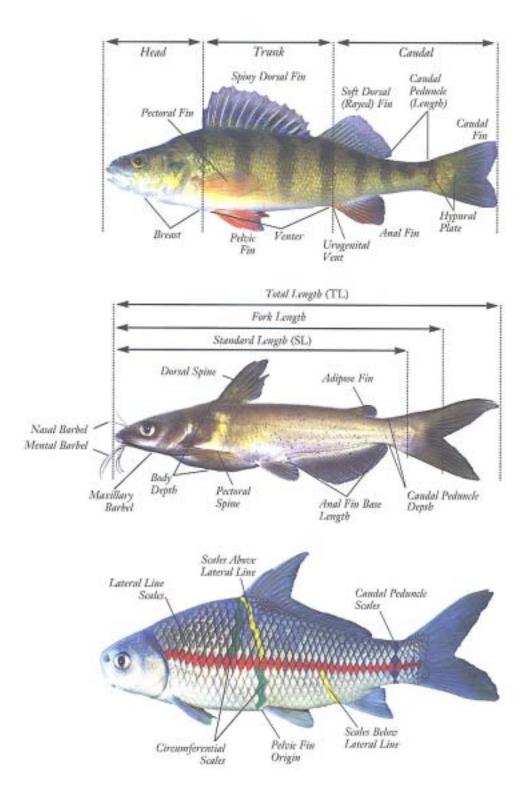
The most obvious features used to identify fishes are body size, shape and color. Numbers, types and sizes of fins also differ between families of fishes, and their location (or absence altogether) can be helpful when distinguishing between species. Most fish possess two basic types of fins, unpaired and paired. Unpaired fins occur along the midline of the body and include the dorsal, anal and caudal fins. Catfishes and trout also possess an adipose (or fleshy) fin located between the dorsal and caudal fins. The dorsal fin can be single or double, and its length and height vary among families. Variations in caudal (tail) fins between fishes are also common, with some tail fins forked and others rounded. If the upper and lower lobes of the caudal fin form a mirror image (symmetrical) then the tail is called homocercal. Heterocercal tails are found on species like sturgeon where one lobe is slightly larger than the other (asymmetrical). Paired fins include the pectoral fins located near the middle of the body behind the gill opening, and the pelvic fins found between the anal and pectoral fins. Most fins are supported by stiff spines, soft flexible rays or both.

Types of scales, scale counts and scale location also provide useful information when identifying fish. Most fishes in North Carolina have one of three scale types, ganoid, cycloid or ctenoid. Ganoid scales form hard, armor-like plates and are found on primitive fishes like sturgeon and gar. Cycloid scales are smooth to the touch and are found on trout and most minnows. Ctenoid scales contain very small spines and produce a rough texture on the skin surface. Members of the sunfish family are covered with ctenoid scales. Members of some fish families (like the catfishes) are scaleless.

Measurements of different external characteristics are often used to distinguish between groups of fishes. Body length is one of the most common measurements taken. Standard length (SL) is the distance from the tip of the snout to the hypural plate, located near the end of the backbone. Fork length (FL) is the distance from the tip of the snout to the deepest part of the fork in the tail. Size limits of inland game fishes in North Carolina are set based on total length (TL) of a fish. Total length is the distance from the tip of the snout with the mouth closed to the end of the longest part of the tail. When measuring total length, the tail is squeezed together and brought to a single point to allow for maximum distance. Eye diameter, body depth, and head length are examples of other measurements used to identify fish.

Once the user is familiar with basic anatomical features, the taxonomic key contained within this document can be used to distinguish between 14 families of fishes commonly found within North Carolina. This key is by no means designed to be an exhaustive list of North Carolina fishes; over 30 families of fishes are known to exist within the state. The families not included within this key will rarely be encountered in the field, but in the event further information is needed, consult the references cited in this document.

# **ANATOMICAL FEATURES**



Reprinted with permission from Mettee et al., 1996, Fishes of Alabama.

	KEY TO FAMILIES OF COMMON NORTH CAROLINA FISHES
1A. 1B.	Body elongate, snake-shaped; pelvic fins absent; anal fin joined to caudal fin go to 2 Body not snake-shaped; pelvic fins present; anal fin not joined to caudal fin go to 3
	Pectoral fin absent; seven small round pores on side of head; one nostril on top of head between eyes; funnel-shaped mouth lacks jawslampreys, Family Petromyzontidae Pectoral fin present; jaws present; one gill opening on side of body; two nostrils located
20.	forward of the eyes;
6	

2A. least brook lamprey

2B. American eel

Caudal fin base arches upward, making the caudal fin asymmetrical ...... go to 4 



3A. caudal fin asymmetrical



3B. caudal fin symmetrical

- 4B. Caudal fin forked; upper lobe larger than lower lobe ...... sturgeon, Family Acipenseridae
- 5A. Snout long and beaklike; body covered with rows of diamond-shaped scales interlocking diagonally to form an armor-like covering......gar, Family Lepisosteidae
- Snout short, not beaklike; body covered with oval, overlapping scales; dorsal fin long, 5B. extending over most of the back......bowfin, Family Amiidae



5A. longnose gar



5B. bowfin

6A.	Pelvic fins located closer to anal fin than	to pectoral fins	go to 7
6B.	Pelvic fins just beneath or slightly behind	pectoral fins	go to 13



6A. pelvic fins closer to anal fin



6B. pelvic fins beneath pectoral fin

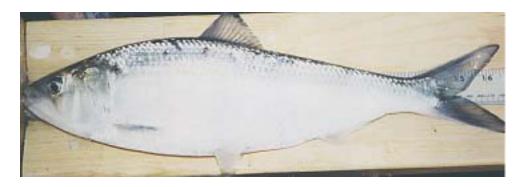


7A. channel catfish



8B. chain pickerel

9A.	Scales along midline of venter meet at an acute angle, forming a sawtooth or knifelike
	edge;herrings/shad, Family Clupeidae
9B.	Scales along midline of venter smooth and rounded with no sawtooth or knifelike edge;
	go to 10



9A. American shad

10A.	Adipose fin present; axillary process present at base of pelvic fin;	
	trouts, Family Salmonid	a
10B.	Adipose fin absent, axillary process absent; go to	1



10A. brook trout



11A. common carp



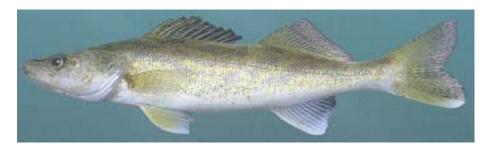
12A. golden shiner



12B. shorthead redhorse



13A. striped bass



14A. walleye



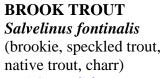
14B. largemouth bass



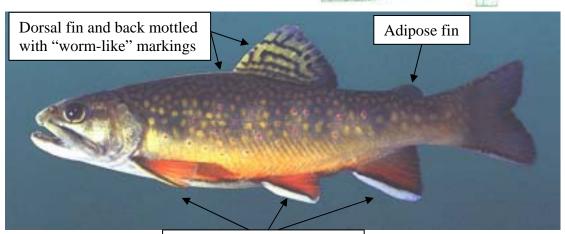
14B. redbreast sunfish

# IDENTIFICATION OF INLAND GAME FISHES AND SELECT NON-GAME FISHES

# Mountain trout (Family Salmonidae)



\*Game fish



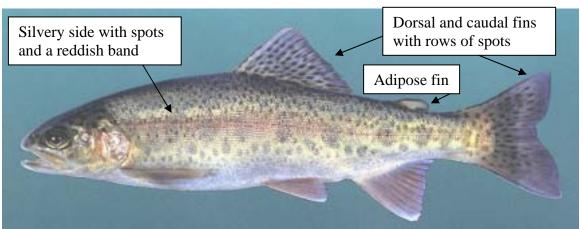
Ventral fins edged in white

# **RAINBOW TROUT**

Oncorhynchus mykiss (redside, California trout, steelhead, silver trout)

\*Game fish

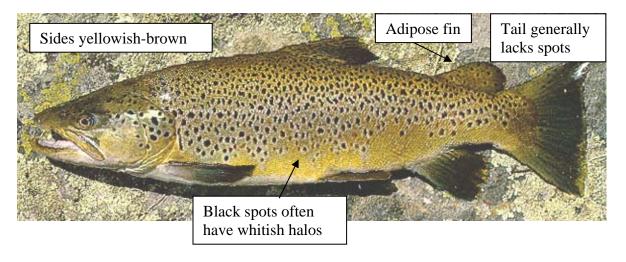




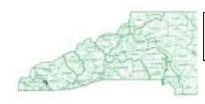
BROWN TROUT
Salmo trutta
(German brown, brownie)

\*Game fish

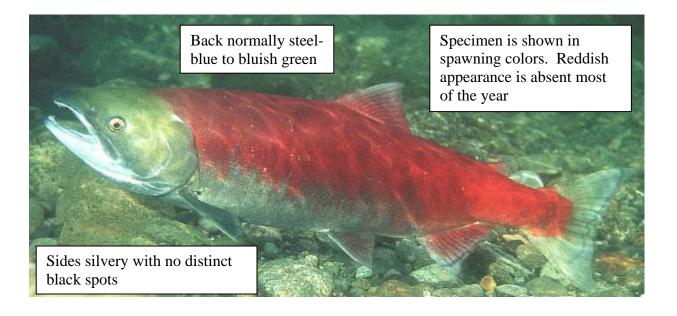




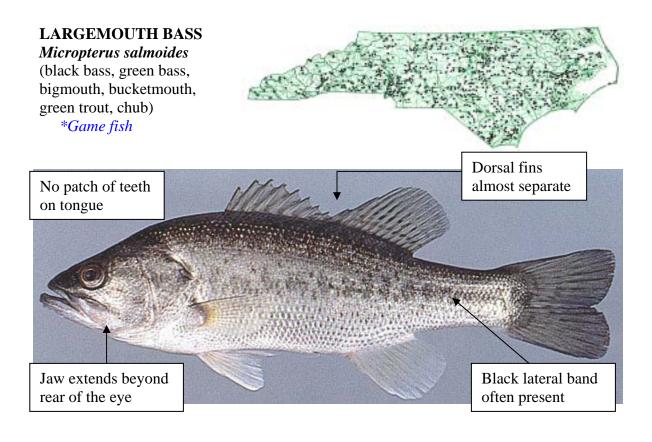
KOKANEE (landlocked sockeye salmon) Oncorhynchus nerka (koke, redfish, silver trout) \*Game fish

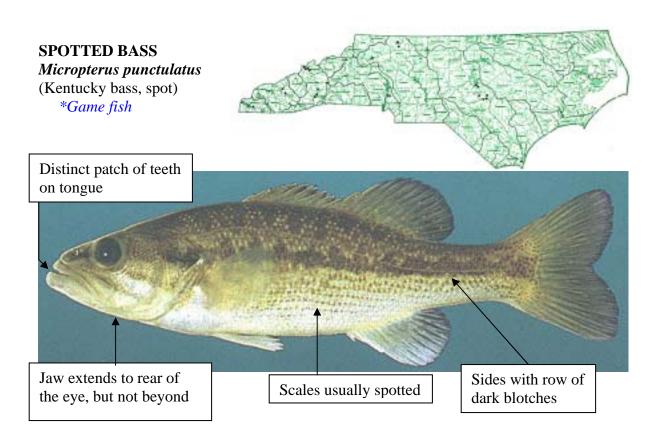


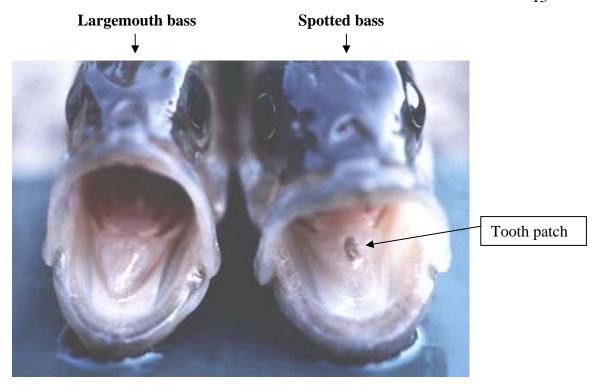
Found only in Nantahalah Reservoir

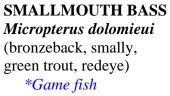


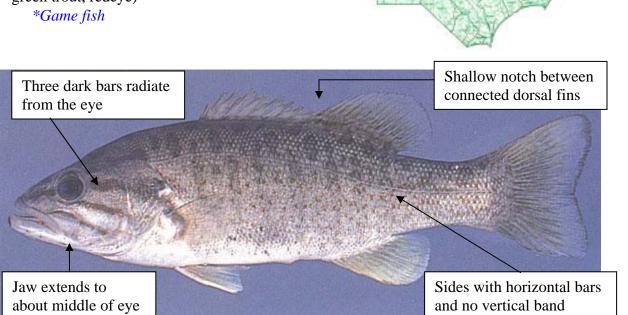
# Sunfish (Family Centrarchidae)



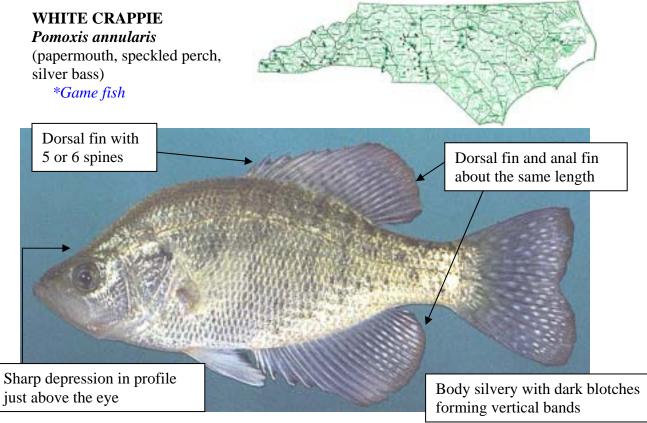




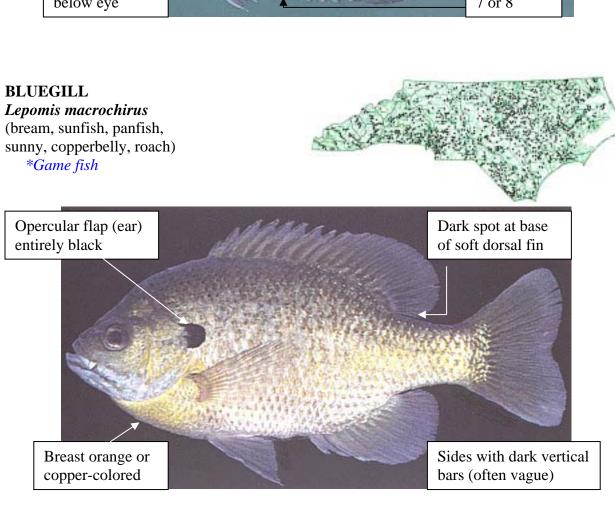




# BLACK CRAPPIE Pomoxis nigromaculatus (papermouth, speckled perch, speckle, calico bass) \*Game fish Dorsal, anal and caudal fins heavily spotted Body silvery with many dark blotches WHITE CRAPPIE



# FLIER Centrarchus macropterus (round sunfish, flier bream) \*Game fish Dorsal spines 11 to 13; Dark spot on each scale Dusky streak below eye Anal spines 7 or 8

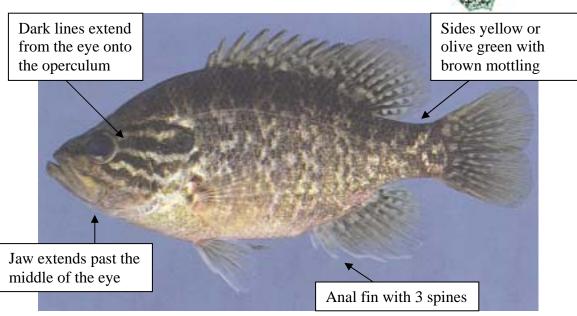


# **PUMPKINSEED** Lepomis gibbosus (common sunfish, yellow sunfish, bream) \*Game fish Edge of opercular flap is orange bordered on both Sides heavily speckled sides by white with orange and black Throat and belly Cheek covered with wavy blue lines bright orange **REDEAR SUNFISH** Lepomis microlophus (shellcracker, stumpknocker, bream, yellow bream) \*Game fish Opercular flap with Sides olive-green a bright red or to gold, with red or orange margin orange flecks No blue streaks on cheeks

## WARMOUTH

Lepomis gulosus (stumpknocker, goggle-eye) \*Game fish

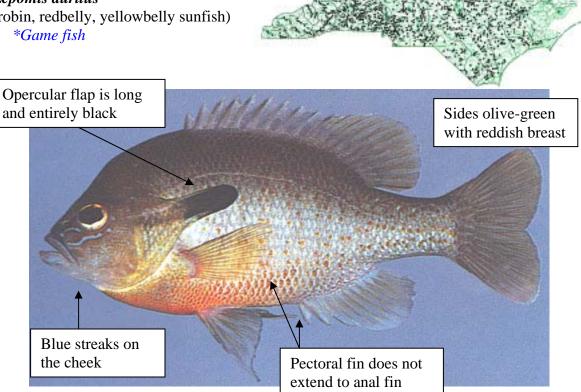




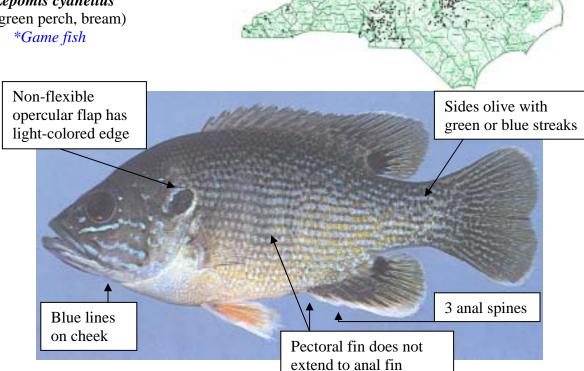
# REDBREAST SUNFISH

Lepomis auritus

(robin, redbelly, yellowbelly sunfish)

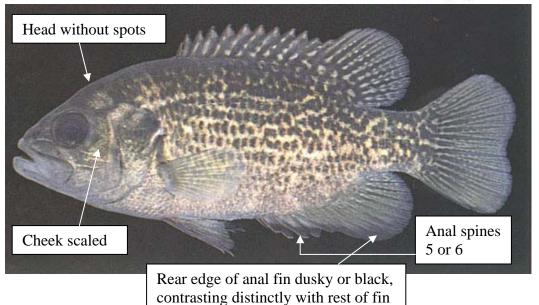


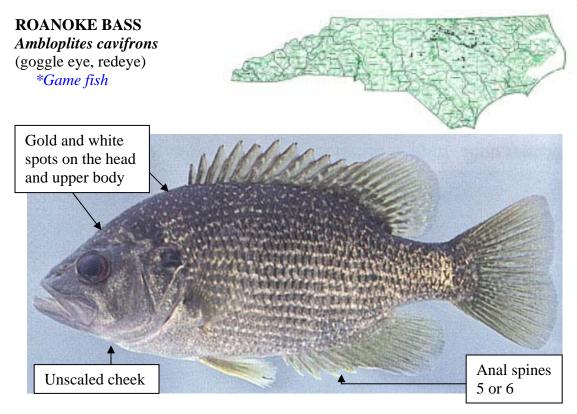
# **GREEN SUNFISH** Lepomis cyanellus (green perch, bream) \*Game fish



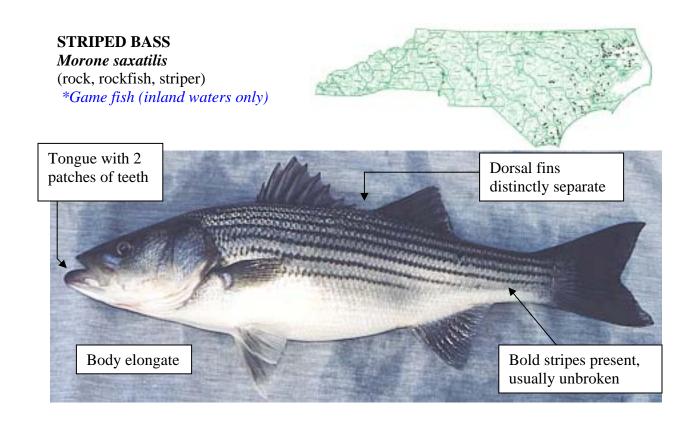
# **ROCK BASS** Ambloplites rupestris (goggle eye, redeye, rock sunfish) \*Game fish



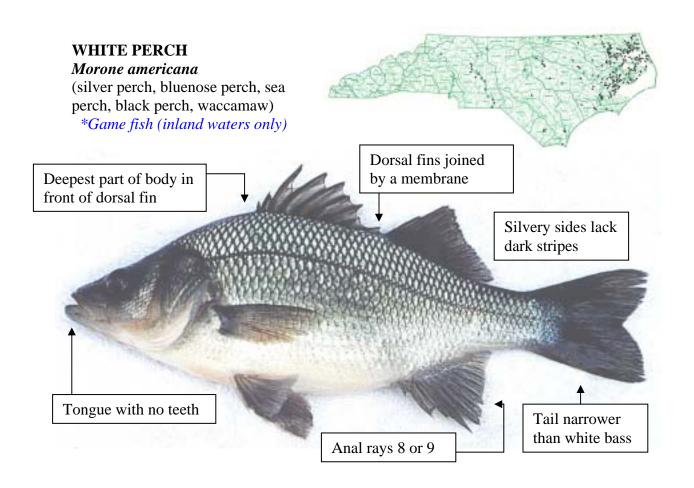




Temperate Basses (Family Moronidae)



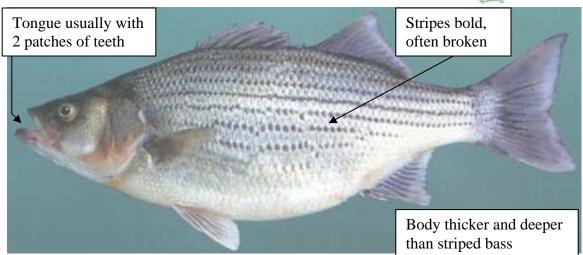
# 20 WHITE BASS Morone chrysops (silver bass, striper) \*Game fish Tongue with a single patch of teeth Stripes often broken below Deep-bodied lateral line and not as bold as Anal rays 12 those on striped bass



# **BODIE BASS**

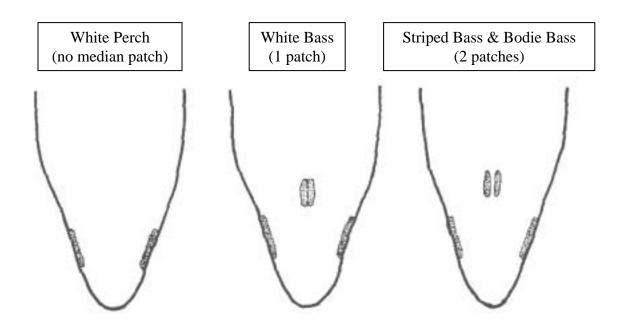
Morone chrysops x saxatilis
(hybrid striped bass, cherokee bass,
palmetto bass, sunshine bass, wiper)
\*Game fish





# **Tooth Patches on Tongues of Temperate Basses (***Morone spp.***)**

(Adapted from Jenkins and Burkhead, 1994)

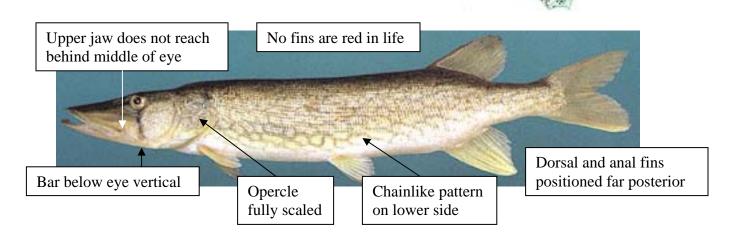


# **CHAIN PICKEREL**

Esox niger

(pike, river pike, grass pike, jack, jackfish, eastern pickerel)

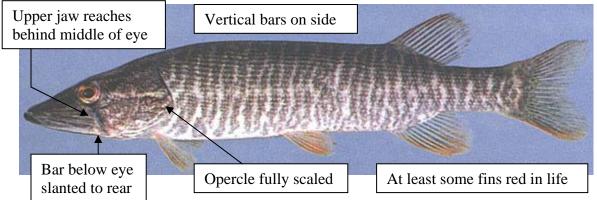
\*Game fish

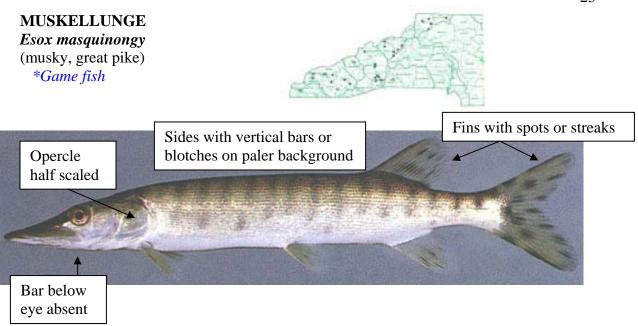


# **REDFIN PICKEREL**

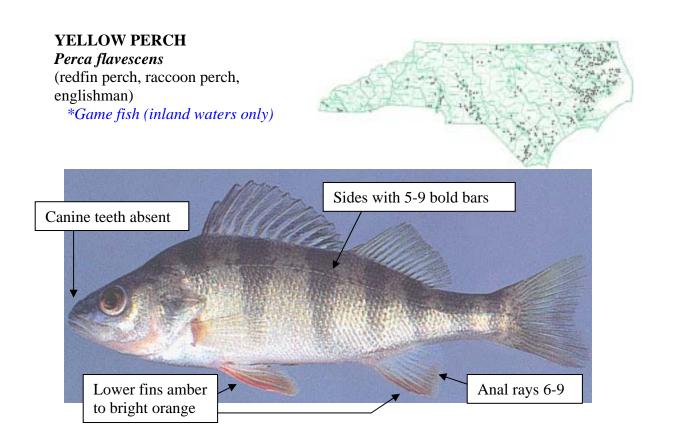
Esox americanus (redfinned pike, banded pickerel, jack, grass pike) \*Game fish

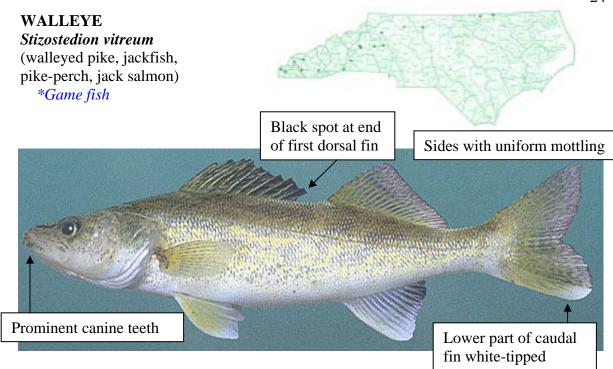


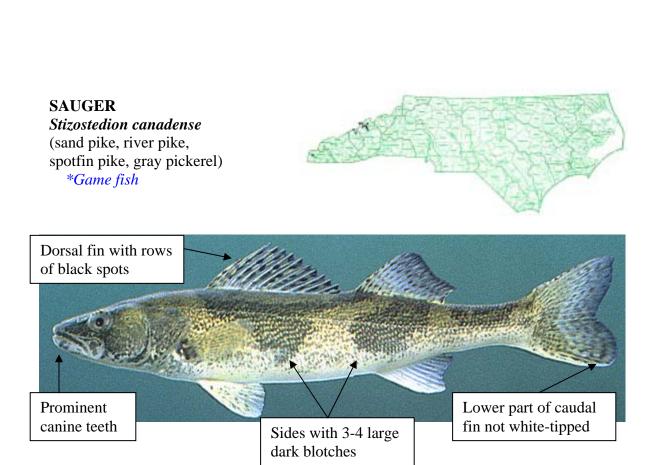




# Perches (Family Percidae)



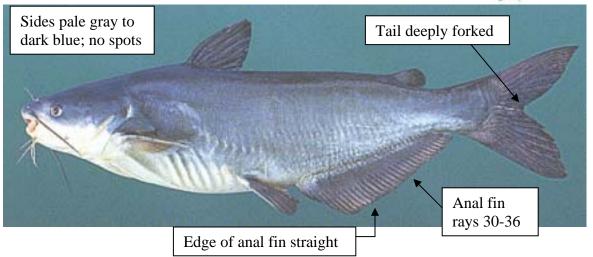




# Catfishes (Family Ictaluridae)

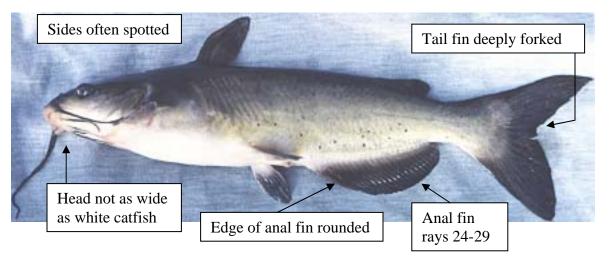
# BLUE CATFISH Ictalurus furcatus (Arkansas cat, forktail cat, chucklehead, silver cat) \*Non-game fish





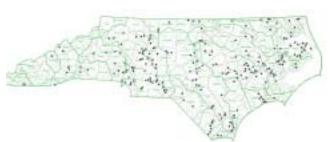
# CHANNEL CATFISH Ictalurus punctatus (spotted cat, fiddler) \*Non-game fish

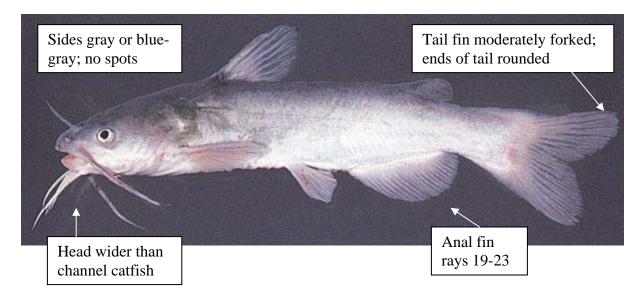




# WHITE CATFISH

Ameiurus catus (river catfish, forked-tail cat) \*Non-game fish





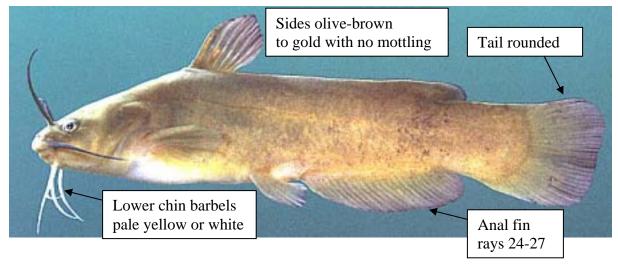
# YELLOW BULLHEAD

# Ameiurus natalis

(yellow cat, creek cat, whitewhiskered bullhead, greaser)

\*Non-game fish

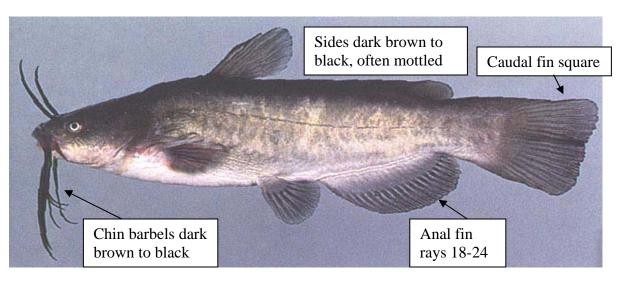


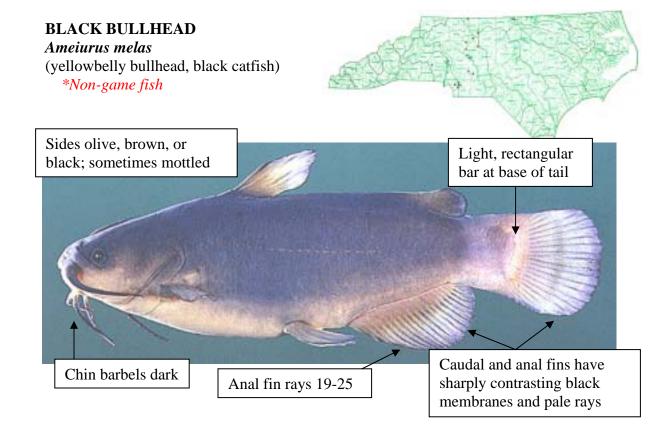


## **BROWN BULLHEAD**

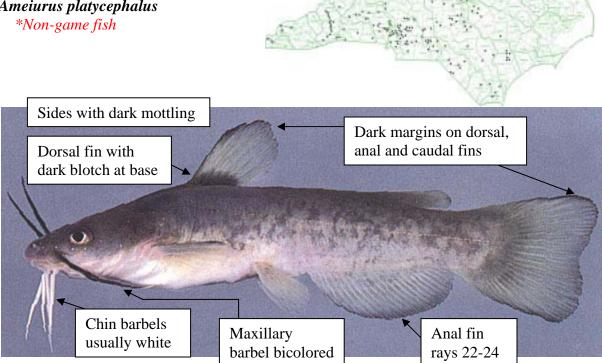
Ameiurus nebulosus (mud cat, creek cat) \*Non-game fish





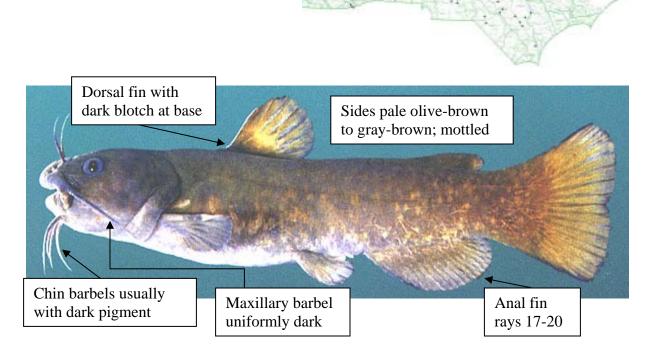


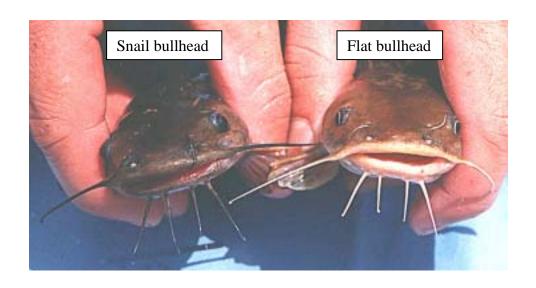
# FLAT BULLHEAD Ameiurus platycephalus



# **SNAIL BULLHEAD** Ameiurus brunneus

\*Non-game fish

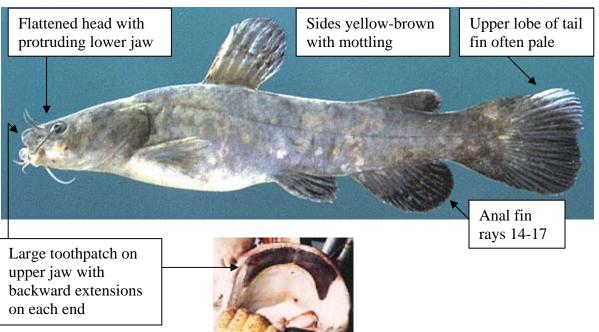


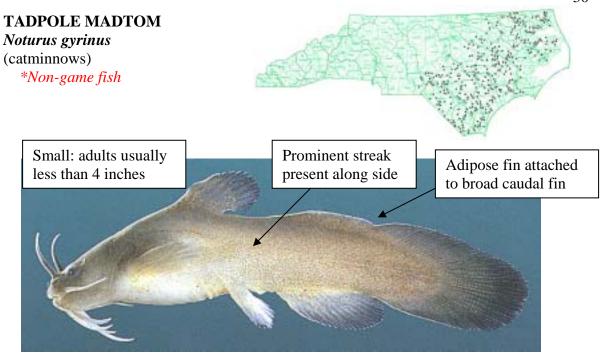


# **FLATHEAD CATFISH**

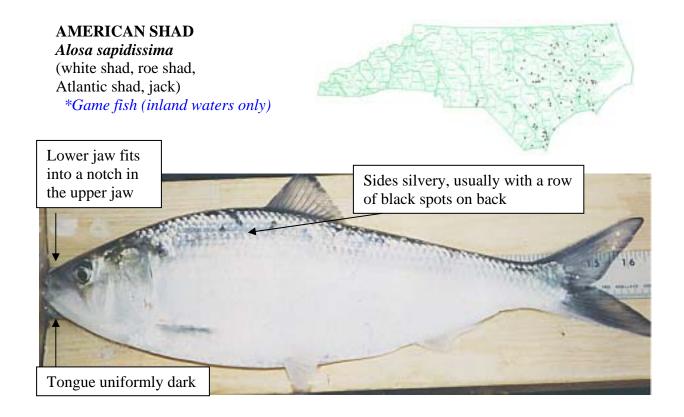
Pylodictis olivaris
(shovelhead cat, mud cat, yellow cat)
\*Non-game fish







# Shads/Herrings (Family Clupeidae)

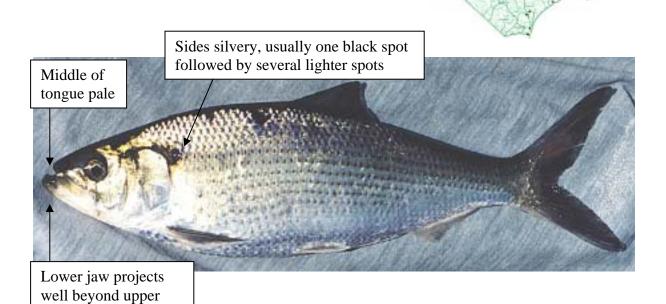


## **HICKORY SHAD**

Alosa mediocris

(hick, tailor shad)

\*Game fish (inland waters only)

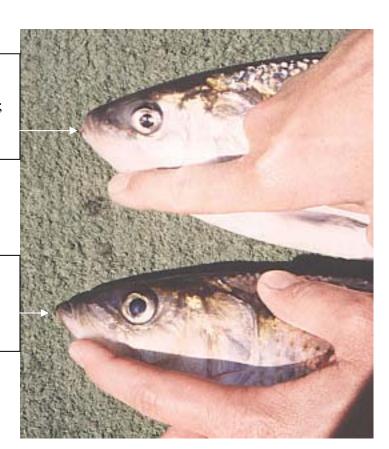


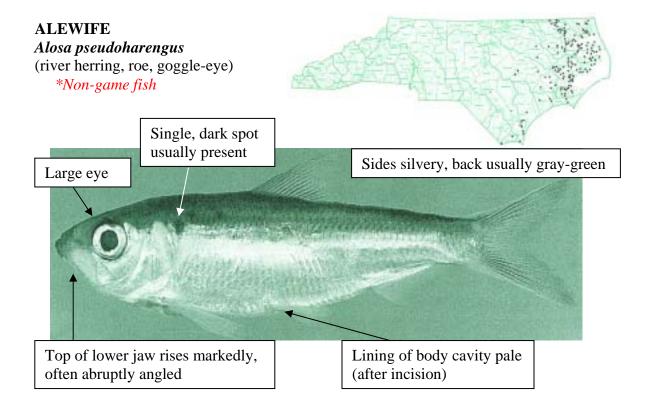
# American shad

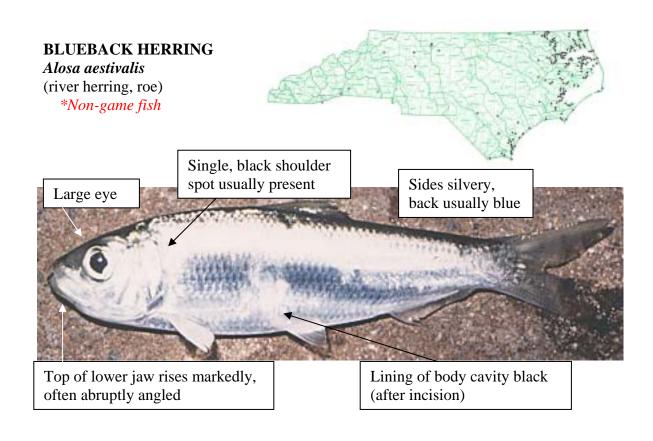
Jaws of equal length; lower jaw fits into notch in upper jaw



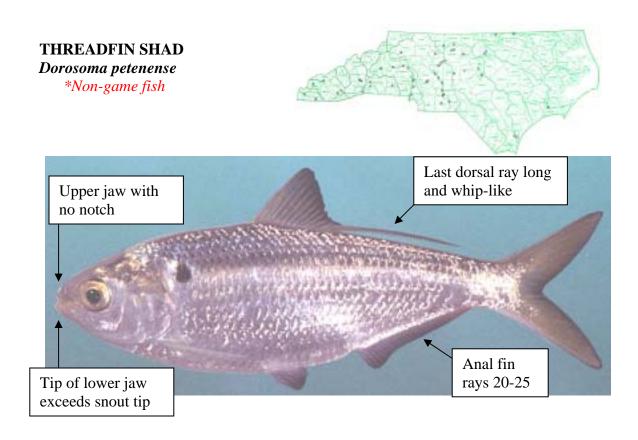
Lower jaw projects well beyond upper

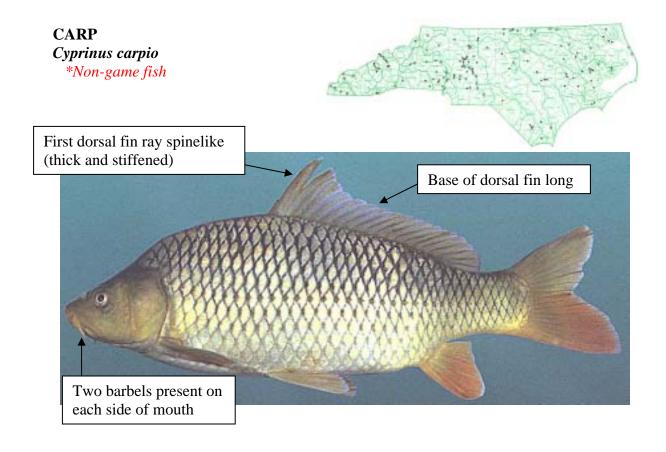


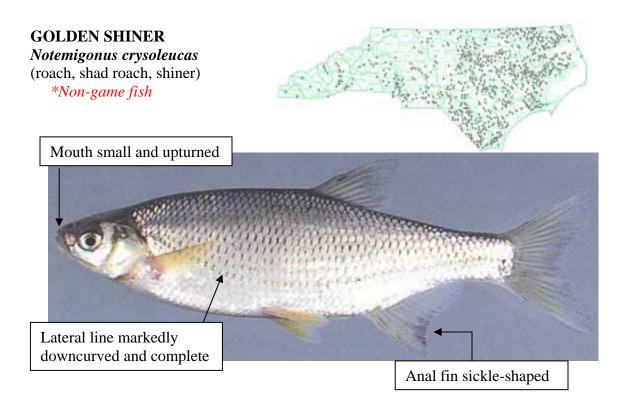


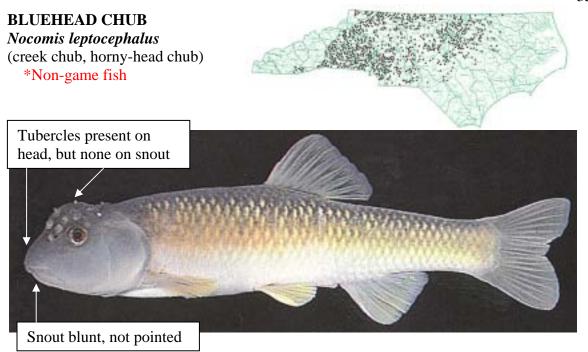


# GIZZARD SHAD Dorosoma cepedianum (nanny shad, shiner) \*Non-game fish Tip of snout exceeds tip of lower jaw Last dorsal ray long and whip-like Bottom corner of upper jaw has a distinct notch

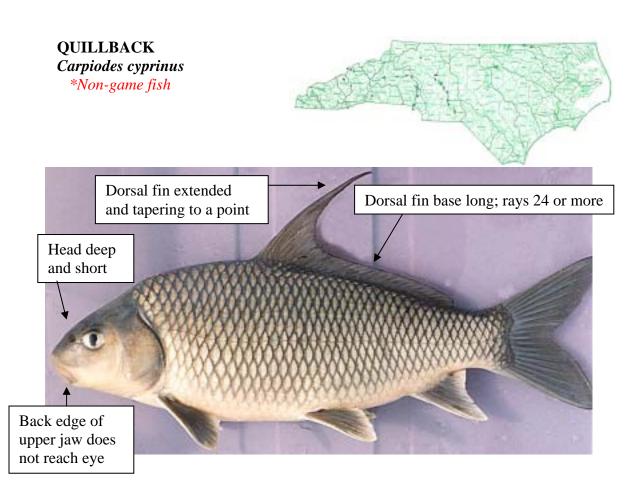






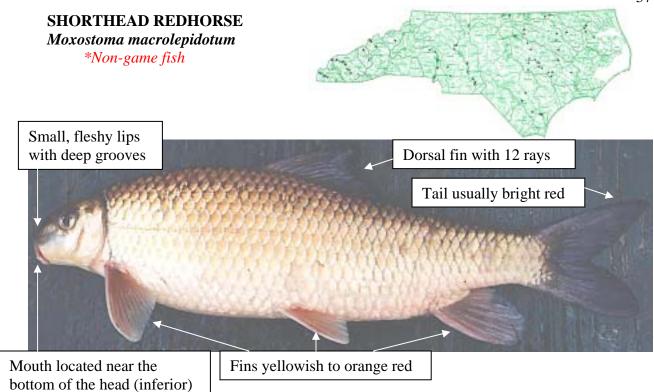


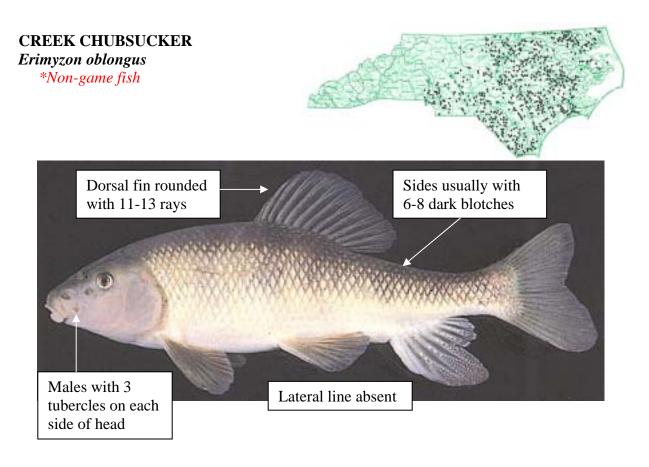
# Suckers (Family Catostomidae)

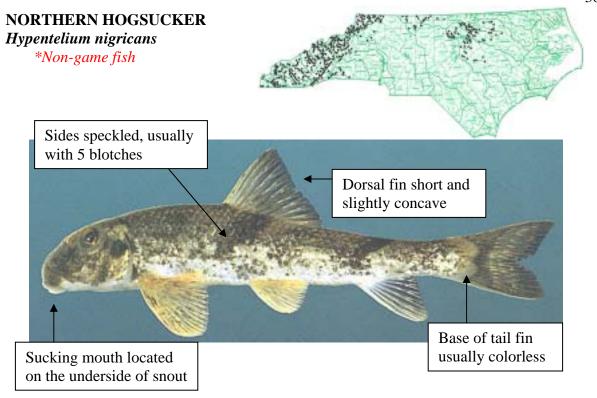


# **BIGMOUTH BUFFALO** Ictiobus cyprinellus \*Non-game fish End of upper lip nearly level with Dorsal fin base long; rays 24 or more lower margin of eye Mouth large and positioned at Fins gray or black front of snout with white edges **SMALLMOUTH BUFFALO** Ictiobus bubalus \*Non-game fish Back area between head and dorsal fin origin arched Dorsal fin base long; rays 24 or more Edge of upper lip below eye Mouth small and

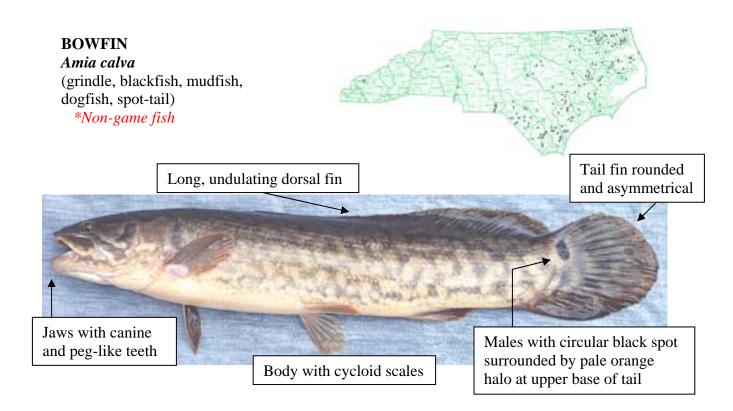
positioned beneath front of snout

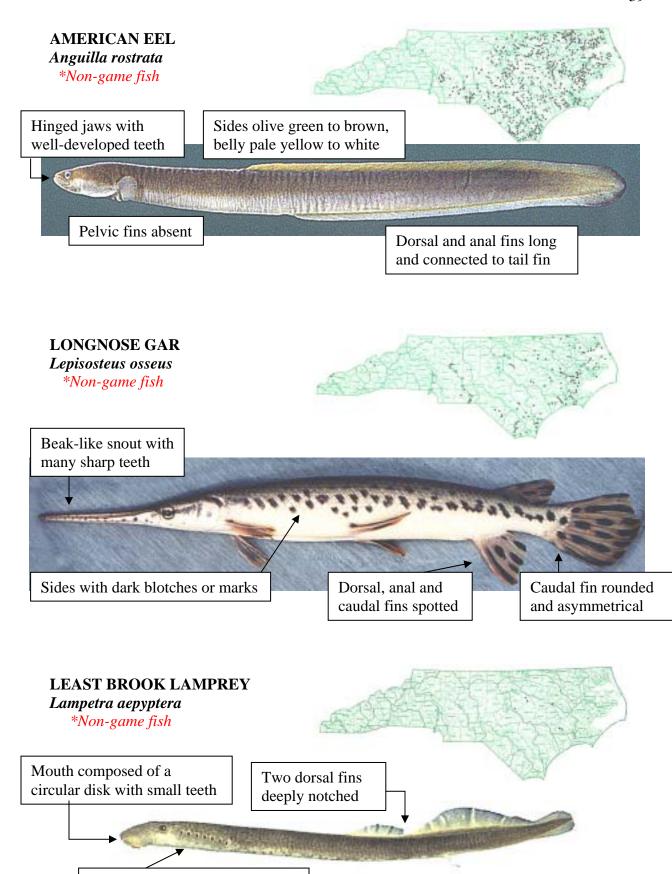




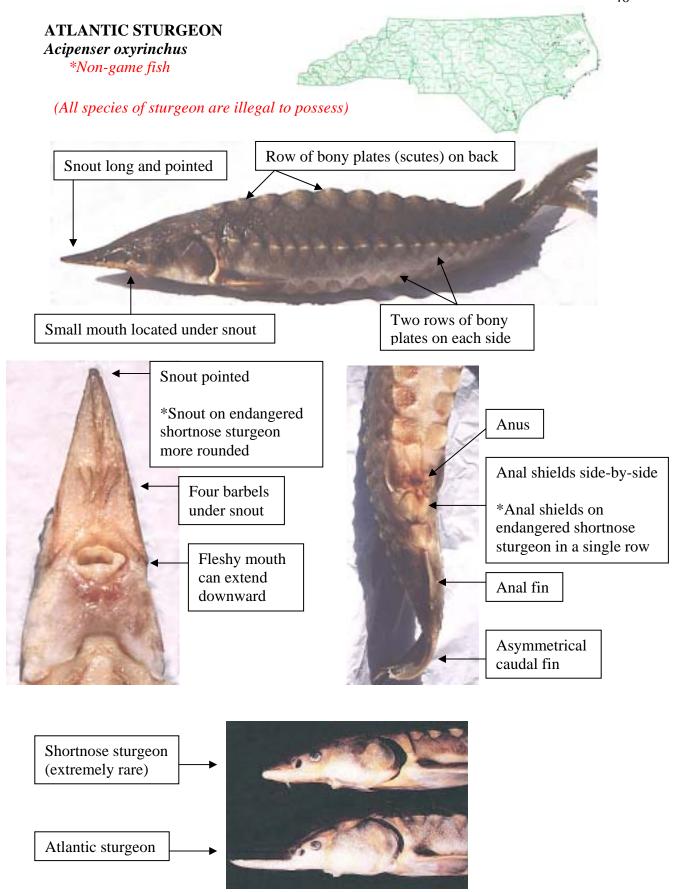


# Additional Non-game Species





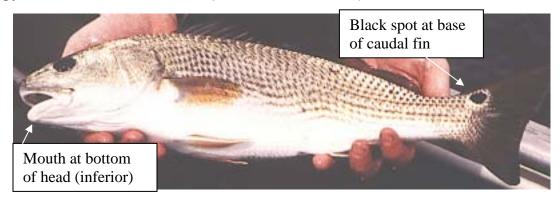
Seven gill openings on each side



#### **RED DRUM**

# Scianops ocellatus

(puppy drum, channel bass) \*Game fish (inland waters only)



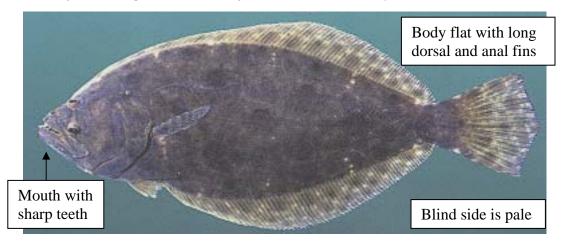
#### **SPOTTED SEATROUT**

Cynoscion nebulosus



### **SOUTHERN FLOUNDER** (and all other flounder)

Paralichthys lethostigma \*Game fish (inland waters only)

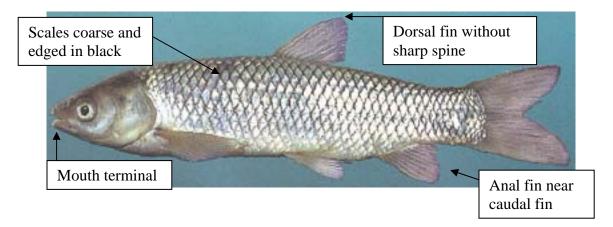


# **Exotics**

### **GRASS CARP**

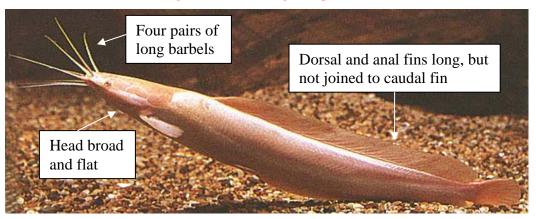
Ctenopharyngodon idellus \*Non-game exotic

(sterile variety may be possessed when used for weed control in private ponds)



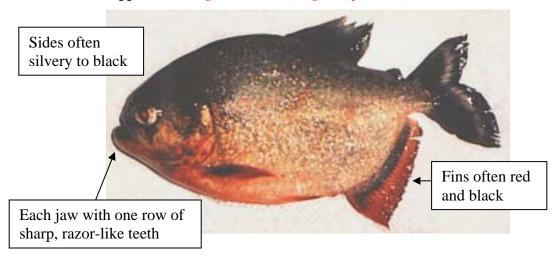
### **WALKING CATFISH**

Clarias batrachus \*Non-game exotic (illegal to possess)



#### **PIRANHA**

Serrasalmus spp. \*Non-game exotic (illegal to possess)

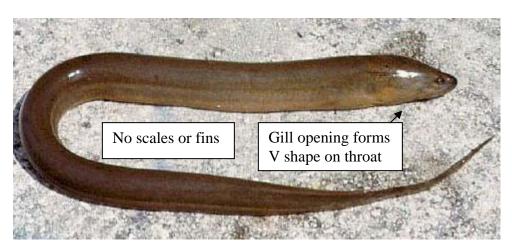


BLACK CARP

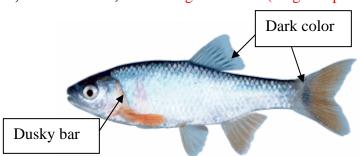
Mylopharyngodon piceus \*Non-game exotic
(sterile variety may be bought, possessed and stocked locally under a WRC issued permit)



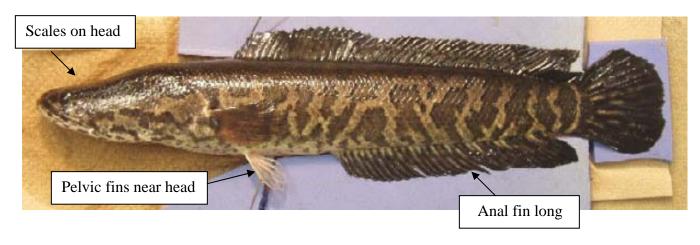
SWAMP EEL
Monopterus albus \*Non-game exotic (illegal to possess)

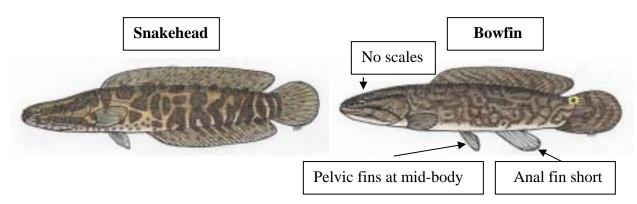


RED SHINER
Cyprinella lutrensis
(redhorse minnow, rainbow dace) \*Non-game exotic (illegal to possess)



# SNAKEHEAD Channa argus \*Non-game exotic (illegal to possess)







NORTH CAROLINA FRESH WATER FISHING RECORDS

The following table contains the current fishing records for a variety of fresh water species.

Last updated 06/03/02

Species	Weight	Location	Date	Angler	Lure/Bait
		BASS			
Bodie (Hybrid)	17/7	Lake Chatuge	3/15/96	Michael R. Hogsed	Rebel Jointed Plug
Roanoke	2/10.75	Nash County Fishing Creek	4/27/94	Richard Elijah Evans	Spinnerbait
Largemouth	15/14	Farm Pond, Union County	3/29/91	William H. Wofford	Crankbait
Rock (redeye)	1/14	Deep River, Carbonton	4/29/98	Robert W. Lytton	Crappie Jig
Smallmouth	10/2	Hiwassee Reservoir	6/1/51	Archie Lampkin	Unknown
Spotted	5/15	Lake Chatuge	11/27/92	Kent Moffitt	Spinnerbait
Striped	54/2	Hiwassee Reservoir	6/7/91	6/7/91 Larry Kleith Verner	
White	5/14	Kerr Reservoir	3/15/86	Jim King	Bucktail
,		CATFISH		,	
Blue	80/0	Cape Fear River	3/21/99	Keith Davis	Unknown
Channel	40/8	Fontana Reservoir	4/15/71	P.P. Paine	Unknown
Flathead	69/0	Cape Fear River	7/26/94	7/26/94 Edward C. Davis	
White	13/0	Lake James	5/21/90	5/21/90 Jerry Wayne Bentley	
Brown Bullhead	3/12	Buck Hall Creek, Duplin County	4/26/97	Gregory Dale Hughes	Night crawler
,		PERCH			
White	2/15	Falls of the Neuse Reservoir	12/16/01	Bob G. Williams, Jr.	Strata Spoon
Yellow	2/9	Indiantown Creek	2/8/90	Evelyn G. Ethridge	Minnow
		PICKEREL			
Chain	8/0	Gaston Reservoir	2/13/68	John H. Leonard	Minnow
Redfin	2/4	Gallberry Swamp	6/23/97	Edward C. Davis	Minnow

# NORTH CAROLINA FRESHWATER FISHING RECORDS - CONTINUED

Species	Weight	Location Date		Angler	Lure/Bait		
		SHAD					
American	7/15.5	Tar River	4/10/74	R.S. Proctor	Shad dart		
Hickory	3/8	Tar River	2/20/92	Ralph D. Johnson	Spoon		
	SUNFISH						
Redear (shellcracker)	4/6*	Lookout Shoals Lake	6/12/88	Ronald Sweet	Orange Rooster- tail		
Bluegill	4/5	Henderson County	7/27/67	Danny Case	Catawba worm		
Flier	1/5	Private pond	3/17/90	Douglas N. McCall	Cricket		
Green	0/8	Farm Pond, Guilford County	9/16/98	Craig Wyrick	Plastic Worm		
Redbreast	1/12	Bladen Co. Big Swamp	5/29/83	Ronald Stanley	Beetle spin		
Warmouth	1/13	Richmond Co. McLeods Pond	5/7/76 Emma Sears		Minnow		
TROUT							
Brook	7/7	Raven Fork River	5/15/80	G.L. Marshall, Jr.	Rooster tail		
Brown	24/10	Nantahala River	4/17/98	Robert Lee Dyer	#11 Rapala		
Rainbow	16/5	Jackson County	12/20/89	Terry L. Gregory	Night crawler		

# NORTH CAROLINA FRESHWATER FISHING RECORDS - CONTINUED

Species	Weig	ht Location			Date Ang		jler	Lure/Bait
OTHER								
Bowfin	17/15		Black River	6/21/97 Gregory A. Demery, Sr.		Cut bait bream		
Carp	48/0	Meck	klenburg Co. pond	3/11/86	William Houston, Jr.		Unknown	
Crappie	4/15	Ashe	boro City Lake #4	4/27/80	Dean Dix	on	Minnow	
Freshwater Drum	8/7		Kerr Lake	3/15/02	Kevin R. A	Alley	Rat-L-Trap	
Grass Carp	68/12	Su	mmerlins Pond, Leland	6/8/98	David W. Stowell		Rebel Pop R	
Longnose Gar	19/4	Nort	heast Cape Fear River	5/15/02	Joseph M. Mobley		Rapa	la broken back minnow
Muskellunge	41/8		Lake Adger	1/23/01	Richard W. Dodd			Big Mack
Tiger Muskellunge	33/8		Lake James	4/3/88	Gary Dean Nanney			Buzz bait
Northern Pike	11/13		Lake James	8/26/78	Keith Gilliam		Stori	m wiggle wart
Sauger	5/15		Norman Lake 7/25/71 David		David Sh	ook	Top water rapala	
Smallmouth Buffalo	88/0		Lake Wylie	11/14/93	Tony Crawford			Pack bait
Walleye	13/8	Lake	Chatuge (Shooting Cr.)	8/16/86	Lamar L. Cofer		Old	faithful spoon

#### HOW TO APPLY FOR A NORTH CAROLINA STATE FISHING RECORD

The North Carolina Wildlife Resources Commission's Division of Inland Fisheries keeps lists of the largest common fresh water game fish caught by sporting methods in North Carolina waters. It keeps only all-tackle records. No line-class records are listed, nor does it keep records on all species of fish. It does not recognize fish that have been caught in nets or on set lines or trot lines nor fish that have been speared, snagged or shot. To qualify for state record recognition, a fish must have been caught on hook and line in a sporting manner.

In making application, the angler **must** provide the following information:

- the common name of the fish,
- its weight on certified scales,
- its length from nose to tip of tail,
- its girth,
- the date caught,
- the location of the catch,
- the name and address of a witness to the weighing,
- and the name and address of the angler.

If there is no witness to the catch, an affidavit as to the circumstances of the catch will be required.

Fish caught in joint waters - that is, bodies of water shared by adjacent states - must have been caught in the North Carolina portion of those waters.

The fish must be weighed on scales that have been certified as accurate by the NC Department of Agriculture. Such scales will bear a dated inspection certificate. Report that date as well as the location of the scales (name and address of the place of business.) Additional information may be required and must be provided if requested. The fish itself must be examined by a qualified expert. Fish should be frozen or otherwise preserved until identified. The Division of Inland Fisheries will arrange for a qualified expert to examine the fish. The above information must be given in written form and the angler must sign his name and provide a full side-view photo of the fish to:

Division of Inland Fisheries 1721 Mail Service Center Raleigh, NC 27699-1721 (919) 733-3633, ext. 281

# APPLICATION FOR NORTH CAROLINA STATE RECORD FISH

(PLEASE PRINT OR TYPE)			
SPECIES (Common Nar	me)		
WEIGHT (lbs./oz.)	LENGTH (in.)	GIRTH (in.)	
CATCH LOCATION _			
CATCH DATE (yy/mm/	/dd)		
ADDRESS			
HOME PHONE:	WORK	PHONE:	
LURE or BAIT	ROD	REEL	
	SCALES LOCATION (Compl	lete address)	
DA	TE LAST CERTIFIED		
	O WEIGHING		
ANGLER'S SIGNATU			
BIOLOGIST'S SIGNA	TURE OF CERTIFICATION		
	IAIL APPLICATION WITH A	FULL SIDE VIEW PHOTO OF	

NCWRC - DIVISION OF INLAND FISHERIES 1721 MAIL SERVICE CENTER RALEIGH, NC 27699-1721

APPLICANT WILL BE NOTIFIED BY MAIL IF THE RECORD HAS BEEN ACCEPTED. TO INQUIRE, PLEASE CALL (919) 733-3633.

#### NORTH CAROLINA ANGLER RECOGNITION PROGRAM (NCARP)

The North Carolina Angler Recognition Program (NCARP) gives anglers an opportunity to catch and release trophy fish, yet have their fishing skills recognized by the N.C. Wildlife Resources Commission. Anglers who catch large fish that exceed a certain size can apply to the Commission's Division of Inland Fisheries for NCARP recognition. In turn, the Division of Inland Fisheries sends these accomplished anglers NCARP certificates featuring color reproductions of fish artwork by renowned wildlife artist and former Commission fisheries biologist Duane Raver. The NCARP program should not be confused with the State Record Fish program that recognizes anglers who catch a new state record fish (largest fish recorded for that species in the state). Instead, NCARP recognizes anglers who catch trophy-size fish that are not necessarily state records.

#### **Trophy Fish/Master Angler Certificates**

The NCARP program features two levels of angler recognition. Anglers catching a fish exceeding the minimum "trophy" weight or length criteria receive a "Trophy Fish" certificate from the Division of Inland Fisheries. These species-specific certificates feature Duane Raver artwork representative of the species caught by the NCARP applicant. In addition, the certificates are printed on high-quality paper suitable for framing. For anglers catching six trophy-size fish of the same species or six different species of trophysize fish, the Division of Inland Fisheries awards a "Master Angler" certificate and patch. Because either lengths or weights can be used to certify fish as NCARP-eligible trophy fish, anglers can practice catchand-release with their fish, allowing other anglers the same trophy fishing opportunity.

#### **Application Forms**

Application forms for having a fish certified as a trophy are available at bait and tackle shops, sporting goods stores and Wildlife Cooperator Agents. An application fee of \$5.00 will be assessed to cover costs associated with the program. Additional information about this program can be obtained from the Division of Inland Fisheries at **(919) 733-3633**.

#### **Saltwater Angler Awards Program**

The North Carolina Division of Marine Fisheries also has an angler recognition program for anglers who catch trophy saltwater fish. Application forms for the Saltwater Angler Awards Program can be obtained from marinas, some charter boat captains and bait and tackle shops located along the coast. For more information about the saltwater trophy fish program, contact Dale Ward of the N.C. Division of Marine Fisheries at **1 (800) 682-2632**.

# NCARP Minimum Trophy Fish Weight or Length Requirements.

Species	Minimum Total Weight	Minimum Total Inches	
Largemouth Bass	8 pounds	24 inches	
Smallmouth Bass	3 pounds	19 inches	
Spotted Bass	2 pounds	15 inches	
Striped Bass	10 pounds	30 inches	
Bodie Bass (striped bass hybrid)	8 pounds	24 inches	
White Bass	2 pounds	17 inches	
Bowfin	10 pounds	22 inches	
Carp	20 pounds	34 inches	
Blue Catfish	30 pounds	41 inches	
Channel Catfish	10 pounds	30 inches	
Flathead Catfish	30 pounds	41 inches	
White Catfish	4 pounds	21 inches	
Crappie (black or white)	2 pounds	16 inches	
Longnose Gar	10 pounds	48 inches	
Muskellunge	20 pounds	41 inches	
White Perch	1 pound	12 inches	
Yellow Perch	1 pound	14 inches	
Chain Pickerel	4 pounds	26 inches	
American Shad	3 pounds	16 inches	
Hickory Shad	2 pounds	13 inches	
Sunfish Redbreast (robin)	1 pound	11 inches	
Redear (shellcracker)	1 pound	11 inches	
Green Sunfish	1 pound	9 inches	
Flier	0.4 pound	8 inches	
Bluegill	1 pound	11 inches	
Warmouth (goggle eye)	1 pound	11 inches	
Rock Bass	1 pound	11 inches	
Roanoke Bass	1 pound	11 inches	
Mountain Trout Hatchery Supported Brook Trout (speckled)	2 pounds	16 inches	
Brown Trout	2.5 pounds	18 inches	
Rainbow trout	2.5 pounds	18 inches	
Wild Trout Waters Brook Trout (speckled)	0.5 pound	10 inches	
Brown Trout	2 pounds	15 inches	
Rainbow Trout	0.75 pound	12 inches	
Walleye	6 pounds	23 inches	

# NCARP Application Form



Form must be filled out completely. Please Print.

Angler Information	on				
Full Name_		Middle		CHT	
Date of Birth		Social	Security Nur	mber	
Street Address_					
City		State_		Zip Code	
Phone Number					
Fish Information					
Kind of Fish		Date 0	Caught		
Weight	lbs	oz	DR	Length	in.
Body of Water W	here Caught			County	
Balt	☐Natural	☐ Artificia	d		
Type of Water	☐ Pond	☐ Reservo	ir/Lake	☐ River/Stream	□ Sound / Bay
Did you release t	he fish?	☐ Yes	□No		

Enclose a check or money order for \$5.00 payable to NCWRC - NCARP and mail to:

**NCWildlife Resources Commission Division of Inland Fisheries** 512 N. Salisbury St., Suite 442 Raleigh, NC 27604-1188

Please allow 8 weeks for delivery.



3,000 copies of this public document were printed at a cost of \$3,102,00 or \$.01 per copy, 79% of the cost of this publication was financed with \$1,576,50 of federal money.

#### REFERENCES AND PHOTOGRAPHY CREDITS

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- Hand, G. R. (*Photos*: striped bass, white perch, hickory shad, channel catfish, bowfin, gar)
- Jenkins, R. E., and N. M. Burkhead. 1993. Freshwater fishes of Virginia. American Fisheries Society, Bethesda. 1,079 p. (*Photos*: largemouth bass, smallmouth bass, bluegill, pumpkinseed, warmouth, redbreast sunfish, green sunfish, rock bass, Roanoke bass, redfin pickerel, muskellunge, yellow perch, white catfish, brown bullhead, flat bullhead, alewife, golden shiner, creek chubsucker)
- Kornegay, J. W. (Photos: piranha)
- Menhinick, E. F. 1991. The freshwater fishes of North Carolina. University of North Carolina Press, Charlotte. 177p. (*Photos*: all range maps)
- Mettee, M. F., P. E. O'Neil, and J. M. Pierson. 1996. Fishes of Alabama. Oxmoor House, Birmingham, Alabama. 820 p. (*Photos*: brook trout, rainbow trout, spotted bass, black crappie, white crappie, flier, redear sunfish, striped bass, white bass, bodie bass, chain pickerel, walleye, sauger, blue catfish, channel catfish, yellow bullhead, black bullhead, snail bullhead, flathead catfish, tadpole madtom, gizzard shad, threadfin shad, common carp, bigmouth buffalo, smallmouth buffalo, northern hogsucker, American eel, least brook lamprey, southern flounder, grass carp)
- Mickey, J. H. (*Photos*: largemouth/spotted bass tooth patch, white bass, flat/snail bullheads, blueback herring, quillback, shorthead redhorse)
- Rohde, F. C., R. G. Arndt, D. G. Lindquist, and J. F. Parnell. 1994. Freshwater fishes of the Carolinas, Virginia, Maryland, and Delaware. University of North Carolina Press, Chapel Hill. 222 p.
- Smith, W. B. 1991 (revised). Basic fish identification. North Carolina Wildlife Resources Commission, Special project, Raleigh. 79 p.
- Sternberg, D. 1987. Freshwater gamefish of North America. Prentice Hall Press, New York, New York. 160 p. (*Photos*: cover striped bass, caudal fins)
- Thomas, C. D. (*Photos*: flathead tooth patch, American shad, shad mouths, sturgeon, red drum)

# BASIC IDENTIFICATION OF COMMON GAME AND NON-GAME FISHES OF NORTH CAROLINA



